# Hispanic Health Awareness and Practices Survey (HHAPS)

Jeffrey Bethel, Ph.D.

CDC/CSTE Applied Epidemiology Fellow

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### San Diego County

- Total population in 2005: 2,824,259<sup>1</sup>
- Hispanic population: 843,901 (30%)<sup>1</sup>
  - 41% are foreign-born
- Busiest port of entry in the world
  - 58.1 million northbound border crossings in 2005 at the county's three points of entry
- San Diego Tijuana is the largest binational metropolitan area in the entire US-Mexico border area (4 million)

#### **Objectives**

- 1. Determine the knowledge, awareness, and practices of health-related issues among Hispanics in San Diego County
- 2. Disseminate findings and make recommendations to appropriate audiences

#### **Topics**

- Influenza vaccination and prevention
- West Nile Virus
- Antibiotic resistance
- Lead poisoning
- Mexican-style soft cheese

#### Influenza

- Each year 200,000 people are hospitalized and 36,000 people die due to influenza
- Vaccination is the best method to prevent influenza
- National Health Interview Survey\*
  - 54% Hispanics over 65 received flu shot previous 12 months
  - Versus 66% non-Hispanic Whites

#### West Nile Virus

- In 2005, 935 cases in 40 counties in CA
  - 17 in Orange County, 104 in Riverside County,
     47 in LA County, 1 in SD County
- No published results from KAP surveys among Hispanics in CA regarding WNV
- 2003 KAP survey in Kansas showed lower awareness among Spanish-speaking respondents

#### Antibiotic Resistance

- Driven by unnecessary use of antibiotics
- Few studies have assessed appropriate use among Hispanics
- Corbett et. al in 2005
  - 53% of NHW gave "correct" answer
  - Versus 19% of Hispanics
- Antibiotics are readily available in Mexico

#### Lead Poisoning

- Nationwide, nearly 900K children <6 years have elevated BLLs
- Most frequent source is paint on houses built before 1978
- In SDC, sources related to Mexican culture collectively rival paint
  - Candy, terra cotta pottery, and folk remedies
- Over 84% of lead poisoning cases <21 years were Hispanic (2001-2004)

#### Queso Fresco

- Made from raw, unpasteurized milk
- Higher moisture and higher pH provide ideal environment for bacteria growth
- Associated with outbreaks of:
  - Listeriosis in LA/OC (1985) and North Carolina (2000)
  - Salmonellosis in Washington (1997), northern
     CA (1997), and San Diego (2003-04)
- Cheese is frequently brought across border from Mexico

#### Methods

- Identified census tracts in 3 areas of San Diego >75% Hispanic population
  - 4 in Vista, 3 in Central SD, 5 in San Ysidro
- Multistage cluster sampling strategy
  - PPS at census block or block group level
  - Systematic sampling at house level
- Door-to-door ~ 15 minute survey
- All analyses conducted using STATA

# Results – Demographics

# Demographics

226
220
226
188
225
225
226
226

# Demographics by Region

	Vista	Cent SD	San Ysidro
	N = 41	N = 54	N = 131
	Mean/%	Mean/%	Mean/%
Age*	32.5	40.8	43.9
Education*	8.9	9.4	10.3
Foreign-born*	92.7%	83.3%	73.3%
Years in US*	11.2	21.2	24.4
# Border Crossings*	0.66	0.72	4.04
# in Household*	5.49	4.26	3.98
Female	68.9%	59.3%	68.7%
Interview in Spanish	92.7%	83.3%	84.7%

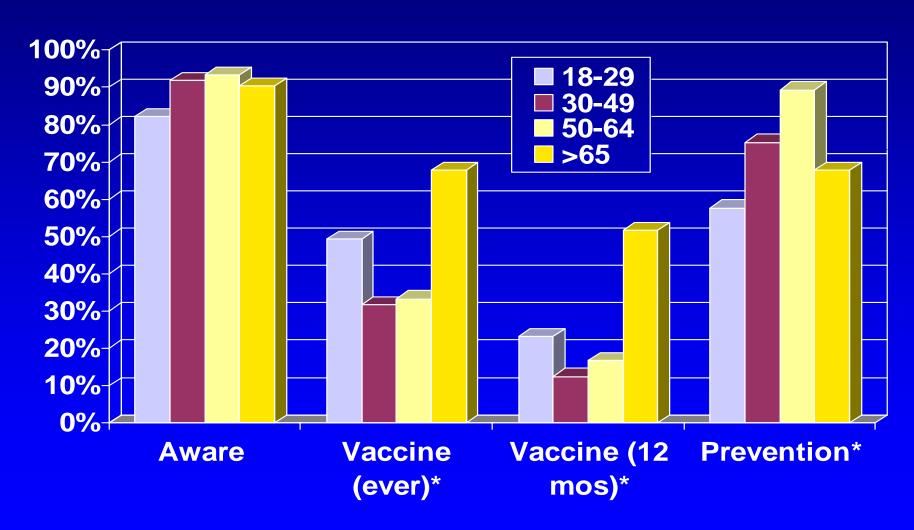
<sup>\*</sup> p-value<0.05

#### Results - Influenza

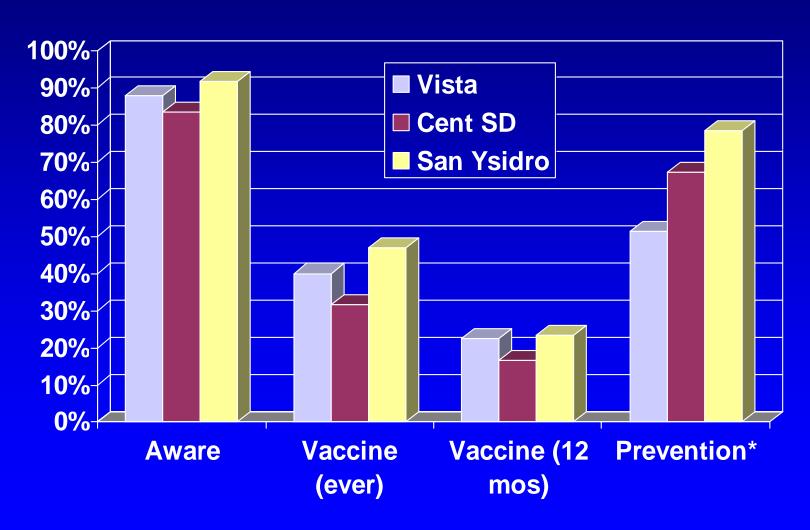
# Influenza (Overall)

	Percent	n
Aware of flu vaccine	88.9%	201
Received flu vaccine (ever)	42.0%	93
Received flu vaccine (12 months)	21.5%	48
Ever hear other flu prevention measures	70.7%	157

## Influenza (by AGE)



## Influenza (by REGION)

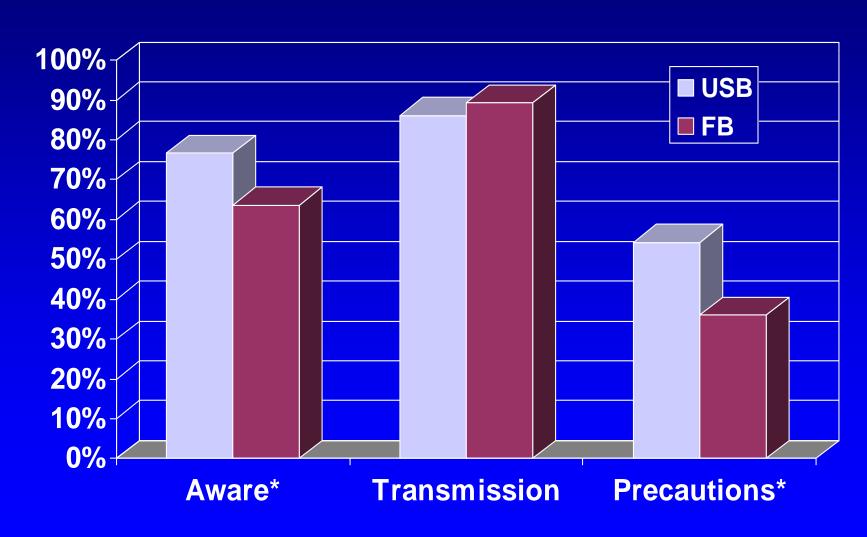


#### Results – West Nile Virus

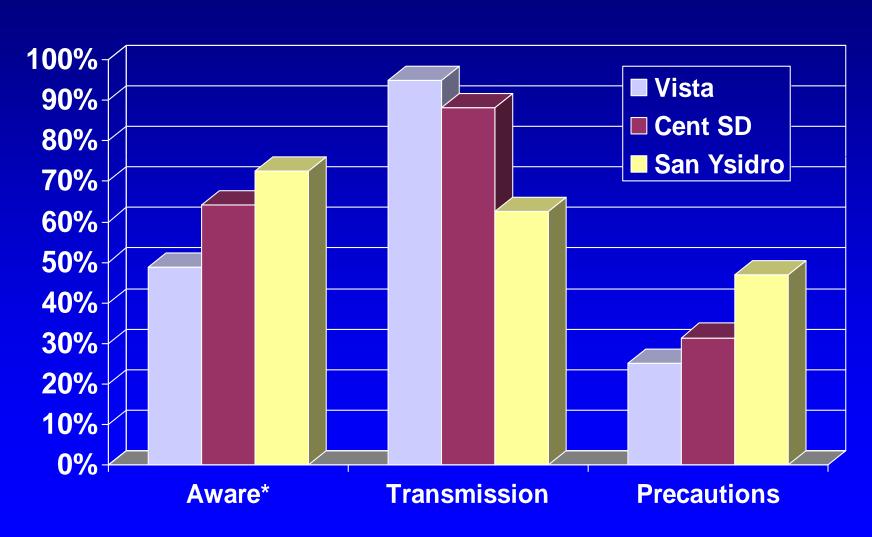
# WNV (Overall)

Percent	n
66.2%	149
93.0%	138
8.8%	13
3.4%	5
12.2%	18
3.4%	5
88.3%	134
40.3%	60
	66.2% 93.0% 8.8% 3.4% 12.2% 3.4% 88.3%

# WNV (by COB)



# WNV (by REGION)



### Results – Antibiotic Resistance

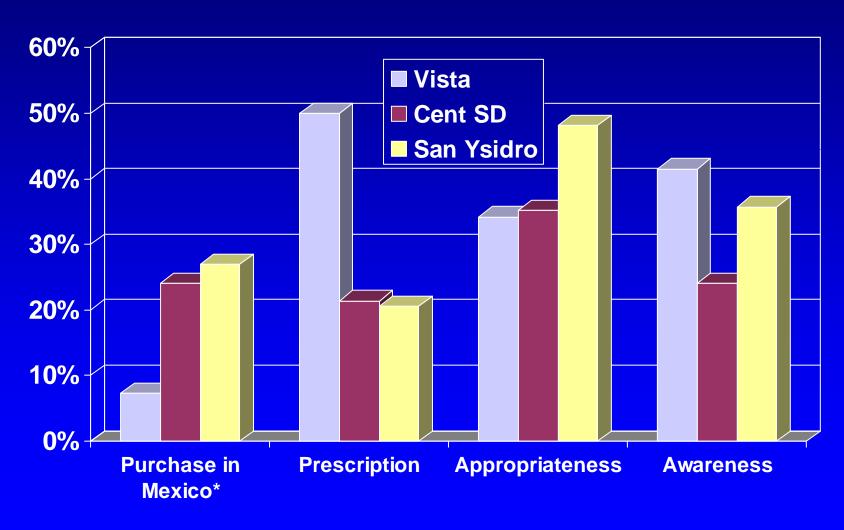
#### Antibiotic Resistance

	Percent	n
Purchased in Mexico previous year	22.7%	51
Source of prescription		
Doctor	70.4%	38
Pharmacist	5.6%	3
Other person	5.6%	3
No one	18.5%	8

#### **Antibiotic Resistance**

	Percent	n
Need antibiotics for cough, cold, or flu symptoms		
Disagree	42.4%	96
Agree	42.9%	95
Neither	14.7%	33
Some germs are becoming harder to treat with antibiotics		
Disagree	34.0%	80
Agree	42.0%	90
Neither	24.1%	54

# Ab Resistance (by REGION)



## Results – Queso Fresco

## Queso Fresco

	Percent	n
Eaten queso fresco previous year	75.9%	170
Usual source		
Travel outside US	15.9%	27
Supermarket	61.8%	105
Small store	18.8%	32
Farm/Ranch	1.8%	3
Homemade	0.0%	0
Street Vendor	1.8%	3
Believe there is a health risk	34.1%	75

# Queso Fresco (by AGE)

	18 – 29	30 – 49	>50
	N = 67	N = 98	N = 61
	Percent	Percent	Percent
Eaten QF previous year*	77.6%	82.5%	63.3%
Usual source			
Travel outside US	15.4%	13.8%	21.1%
Supermarket	61.5%	61.3%	63.2%
Small store	21.2%	21.3%	10.5%
Farm/Ranch	1.9%	0.0%	5.3%
Street Vendor	0.0%	3.8%	0.0%
Believe there is a health risk*	19.1%	32.05	53.3%

<sup>\*</sup> p-value<0.05

# Queso Fresco (by COB)

	US-Born	FB
	N = 47	N = 179
	Percent	Percent
Eaten queso fresco previous year	65.2%	78.7%
Usual source		
Travel outside US	23.0%	14.7%
Supermarket	60.0%	62.1%
Small store	16.7%	19.3%
Farm/Ranch	0.0%	2.1%
Street Vendor	0.0%	2.1%
Believe there is a health risk*	11.9%	39.3%

<sup>\*</sup> p-value<0.05

# Results – Lead Poisoning

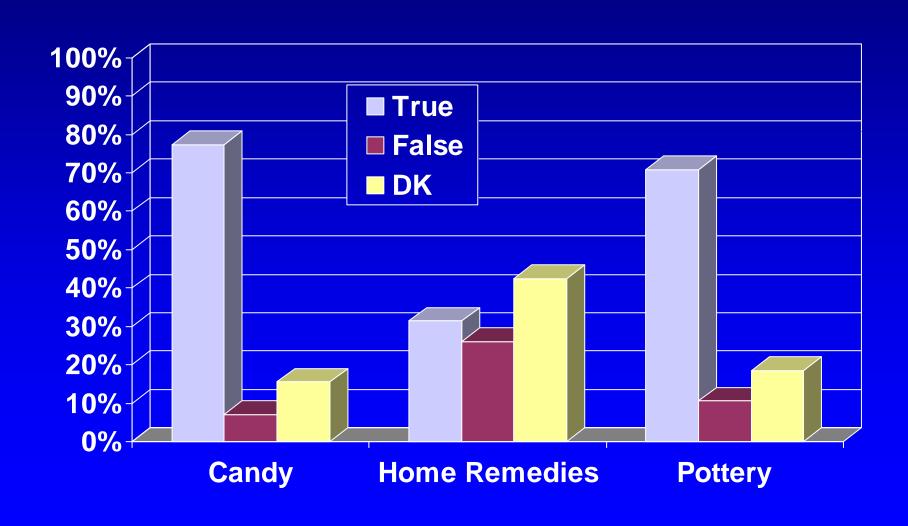
# Lead Poisoning Awareness

	Percent	n
Heard of lead poisoning		
Overall	83.6%	189
18-29	77.6%	52
30-49	88.8%	87
>50	82.0%	50
US-Born	89.4%	42
Foreign-Born	82.1%	147

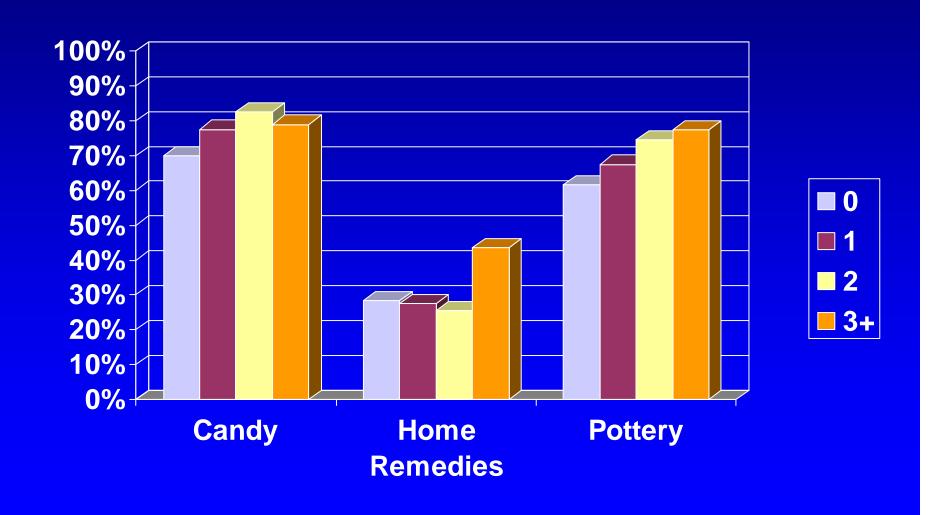
## Lead Poisoning Awareness

	Percent	n
Heard of lead poisoning		
Male	77.9%	60
Female	86.7%	129
Vista*	80.5%	33
Central San Diego	70.4%	38
San Ysidro	90.1%	118

## Lead Poisoning Exposures



# Lead Poisoning Knowledge and Number Kids in Household



### Summary of Key Findings

- Demographics of Hispanics in three areas of SDC vary dramatically
- Nearly 90% of respondents were aware of flu vaccine, but only 21.5% had one the previous 12 months
  - 51.6% of people over 65 years
- Few FB and Vista residents have taken precautions to protect against WNV
  - 36.0% and 25.0%, respectively

### Summary of Key Findings

- Overall, 42% knew appropriateness of antibiotic use
- >75% had eaten queso fresco previous year and >80% usually purchased it from a supermarket or small store
  - NONE homemade
- >80% were aware of lead poisoning and most knew potential exposure from candy and pottery but not home remedies

#### Conclusions

- Immigrant Hispanic population has lower awareness of health-related topics
- Need to improve education and outreach efforts to Spanish-speaking immigrants
- Education and outreach efforts will be specific to regions of San Diego County

#### **Next Steps**

- Work with topic-specific programs within SDC HHSA and CDHS to improve education and outreach to at-risk populations
  - Lead Program, Immunization, Vector Control,
     COBBH, Regional PHNs
- Keep spreading the word!
  - Vista Community Clinic, SYHC, Logan and Sherman Heights FHC, etc.

#### Acknowledgements

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- San Ysidro Health Center
- Vista Boys & Girls Club

# QUESTIONS?